had been set free at *p*, that when the drop was stirred the whole became colourless.

51. A drop of solution of iodide of potassium mingled with starch was put into the same position at *p* and *n*; on turning the machine, iodine was evolved at *p*, but not at *n*.

52. A still further improvement in this form of apparatus consists in wetting a piece of filtering paper in the solution to be experimented on, and placing that under the points *p* and *n*, on the glass: the paper retains the substance evolved at the point of evolution, by its whiteness renders any change of colour visible, and allows of the point of contact between it and the decomposing wires being contracted to the utmost degree.

A piece of paper moistened in the solution of iodide of potassium and starch, or of the iodide alone, with certain precautions (58), is a most admirable test of electro-chemical action; and when thus placed and acted upon by the electric current, will show iodine evolved at *p* by only half a turn of the machine.

With these adjustments and the use of iodide of potassium on paper, chemical action is sometimes a more delicate test of electrical currents than the galvanometer (9). Such cases occur when the bodies traversed by the current are bad conductors, or when the quantity of electricity evolved or transmitted in a given time is very small.

53. A piece of litmus paper moistened in solution of common salt or sulphate of soda was quickly reddened at *p*. A similar piece moistened in muriatic acid was very soon bleached at *p*. No effects of a similar kind took place at *n*.

54. A piece of turmeric paper moistened in solution of sulphate of soda was reddened at *n* by two or three turns of the machine, and in twenty or thirty turns plenty of alkali was there evolved. On turning the paper round, so that the spot came under *p*, and then working the machine, the alkali soon disappeared, the place became yellow, and a brown alkaline spot appeared in the new part under *n*.

55. On combining a piece of litmus with a piece of turmeric paper, wetting both with solution of

sulphate of soda, and
putting the paper on the glass, so that *p*
was on the litmus and
n on the turmeric, a very few turns of
the machine sufficed to
show the evolution of acid at the former
and alkali at the latter,
exactly in the manner effected by a volta-
electric current.

56. All these decompositions took place
equally well, whether
the electricity passed from the machine
to the foil a, through
water, or through wire only; by
contact with the conductor/